

GIORGIO A. PAGANI

PUBBLICATIONS

1. R. FUSCO, S. ROSSI, S. MAIORANA AND **G. A. PAGANI**.
Ricerche sui Sulfeni. Casi di oligomerizzazione.
Gazz. Chim. Ital., **95**, **1965**, 774.
2. R. FUSCO, V. ROSNATI AND **G. A. PAGANI**.
Ring opening of 3-carboxy- and 3-unsubstituted pyrazoles.
Tetrahedron Lett., **1966**, 1739.
3. S. MAIORANA AND **G. A. PAGANI**
Reazioni dell'allil-solfocloruro con le enammine
La Chimica e L'Industria, **48**, **1966**, 1193
4. S. MAIORANA AND **G. A. PAGANI**.
Reazioni di ciclizzazione di β -allilsolfonil-enammine.
La Chimica e L'Industria, **48**, **1966**, 1195.
5. S. ROSSI AND **G. A. PAGANI**.
Ricerche sui solfoni ciclici. Nota I. 1H-2,1-Benzotiazine-2,2-diossido.
Ann. Chim., **56**, **1966**, 728.
6. S. ROSSI AND **G. A. PAGANI**.
Ricerche sui solfoni ciclici. Nota II. Sintesi del sulfostirile (1H-2,1-benzotiazina-1,1-diossido).
Ann. Chim., **56**, **1966**, 741.
7. S. ROSSI AND **G. A. PAGANI**.
Cyclic Sulphones III. 3-Phenyl-2H-thiopyran-1,1-dioxide and 2H-thiochromen-1,1-dioxide. Synthesis and acidic properties.

Tetrahedron Lett., **1966**, 2129.

8. R. FUSCO, V. ROSNATI AND **G. A. PAGANI**.
Ring opening in the pyrazole series.
Tetrahedron Lett., **1967**, 4541.
9. **G. A. PAGANI**.
Ricerche sui solfoni ciclici. Nota IV. 3-Fenil-2H-tiopirano-1,1-diossido.
Gazz. Chim. Ital., **97**, **1967**, 1518.
10. **G. A. PAGANI**.
Ricerche sui solfoni ciclici. Nota V. 4H-1,4-benzotiazine-1,1-diossido.
Gazz. Chim. Ital., **97**, **1967**, 1804.
11. **G. A. PAGANI**, S. BRADAMANTE, F. D'ALÒ AND A. MASSERINI.
Struttura ed isomeria di prodotti da S-acilvinilazione delle forme aperte disali di N-benzil-tiazolio.
Gazz. Chim. Ital., **97**, **1967**, 1770.
12. **G. A. PAGANI** AND S. MAIORANA.
Ricerche sui solfoni ciclici. Nota IX. Sintesi e proprietà dell'1H-isotiocromene-2,2-diossido.
La Chimica e L'Industria, **49**, **1967**, 1347.
13. **G. A. PAGANI** AND S. MAIORANA.
Ricerche sui solfoni ciclici. Nota VIII. Casi di estrusione di SO₂ in 4H-1,4-tiazine-1,1-diossido.
La Chimica e L'Industria., **49**, **1967**, 1194.
14. V. ROSNATI, **G. A. PAGANI** AND F. SANNICOLO'.
Neighbouring group participation in solvolytic reactions of α -chloroketones.

- Tetrahedron Lett.*, **1967**, 1241.
15. V. ROSNATI, **G. A. PAGANI** AND F. SANNICOLÒ'.
Nucleophilic substitutions of α -chloroketones. 1-Phenylmercapto- and 1-phenylsulphonyl-3-chloropropanones.
Tetrahedron Lett., **1967**, 4545.
16. **G. A. PAGANI** AND S. BRADAMANTE.
Cyclic Sulphones VI. 4H-1,4-Benzothiazine-1,1-dioxide
Tetrahedron Lett., **1968**, 1041.
17. V. ROSNATI, F. SANNICOLÒ' AND **G. A. PAGANI**.
Sulla condensazione tra pirocatechina e \square, \square -dibromodiidrocinnamato di metile.
Gazz. Chim. Ital., **98**, **1968**, 1069.
18. V. ROSNATI, F. SANNICOLÒ' AND **G. A. PAGANI**.
Sostituzioni nucleofile su α -clorochetoni. Nota IV. Su alcune reazioni del 2-(2'-cloro)-propionil-1,4-benzodiossano.
Gazz. Chim. Ital., **98**, **1968**, 1085.
19. V. ROSNATI, F. SANNICOLÒ' AND **G. A. PAGANI**.
Nucleophilic substitutions of \square -chloroketones. Part VI. 1-Chloro-3-phenylmercapto-2-butanone.
Tetrahedron Lett., **1968**, 4649.
20. S. BRADAMANTE, S. MAIORANA, A. MANGIA AND **G. A. PAGANI**.
Cyclic Sulphones VII. Addition of diazomethane to 3-phenyl-2H-thiopyran-1,1-dioxide.
Tetrahedron Letters, **1969**, 2971.
21. R. FUSCO, S. MAIORANA AND **G. A. PAGANI**.

Un nuovo metodo di nitrurazione di ammine aromatiche primarie.

La Chimica e L'Industria, **51**, **1969**, 1098.

22. V. ROSNATI, F. SANNICOLO¹ AND **G. A. PAGANI**.
Sostituzioni nucleofile su \square clorochetoni. Nota VII. Su alcune reazioni solvolitiche dell'1-cloro-3-fenilmercaptopropanone.
Gazz. Chim. Ital., **99**, **1969**, 152.
23. S. BRADAMANTE, R. FUSCO, S. MARCHESINI AND **G. A. PAGANI**.
Studies in the heterophane field. [9]Heterophanes.
Tetrahedron Lett., **1970**, 11.
24. S. BRADAMANTE, A. MANGIA AND **G. A. PAGANI**.
Cyclic Sulphones Part XII. Thiin-yl-S,S-ioxide anions.
Tetrahedron Lett., **1970**, 3381.
25. S. BRADAMANTE, A. MANGIA AND **G. A. PAGANI**.
Cyclic Sulphones. Part XI. Extensive delocalisation in benzo- and dibenzothiopyran-S,S-dioxide anions.
J. Chem. Soc., **1971**, 545.
26. S. BRADAMANTE, R. FUSCO, A. MARCHESINI AND **G. A. PAGANI**.
Studies in the heterophanes field. [9]Heterophanes of six-membered aromatics.
Tetrahedron Lett., **1971**, 671.
27. S. BRADAMANTE, S. MAIORANA, A. MANGIA AND **G. A. PAGANI**.
Cyclic Sulphones Part X. Kinetic evidence for the aromatic character of anions derived from benzo- and dibenzo thiopyran-S, S-dioxide systems.
J. Chem. Soc. (B), **1971**, 74.
28. S. BRADAMANTE, A. MARCHESINI AND **G. A. PAGANI**.

- **Metil-omologi di [9]eterofani pentaatomici.**
La Chimica e L'Industria, **53**, **1971**, 267.
29. S. BRADAMANTE, A. MARCHESINI AND **G. A. PAGANI.**
[9]1,3-Cyclopentadienidophane.
Tetrahedron Lett., **1971**, 4621.
30. S. MAIORANA AND **G. A. PAGANI.**
□ **Alogenetietani-S,S-diossido. Eliminazione di acido alogenidrico in 2-cloro-3- morfolino-4,4'-dimetiltietani-S,S-diossido.**
La Chimica e L'Industria, **53**, **1971**, 261.
31. S. MAIORANA AND **G. A. PAGANI.**
□ **Alogenetietani-S,S-diossido. Azione delle basi su 2-alogeno-morfolino-tietani-S,S-diossido**
La Chimica e L'Industria, **53**, **1971**, 358.
32. S. MAIORANA AND **G. A. PAGANI.**
Reazioni del propargisolfocloruro con l'□morfolinostirene.
La Chimica e L'Industria, **53**, **1971**, 362.
33. **G. A. PAGANI** AND S. MAIORANA.
Ricerche sui solfoni ciclici. Nota XIII. Sintesi del nafto-[1,8-*bc*]tiepino-S,S-diossido.
La Chimica e L'Industria, **53**, **1971**, 387.
34. **G. A. PAGANI** AND S. MAIORANA.
Solfoni ciclici della serie dell'1,4-benzoossatiino.
La Chimica e L'Industria, **53**, **1971**, 468.
35. **G. A. PAGANI** AND S. MAIORANA.

- Addizione del diazometano sul 2H-tiocromene-S,S-diossido. Sintesi del tiocromeno[4,3-*c*]pirazolo e del corrispondente S,S-diossido.**
La Chimica e L'Industria, **53**, **1971**, 469.
36. **G. A. PAGANI** AND S. MAIORANA.
Tetrazoli condensati con anelli eterociclici: reazioni con composti chetometilenici.
La Chimica e L'Industria, **53**, **1971**, 470.
37. **G. A. PAGANI** AND S. MAIORANA.
Dieteroanaloghi del sesquifulvalene. Sintesi e proprieta' di 4-(4'-tiopiraniliden)-1,4-diidro-N-metil-piridine-S,S-diossido.
La Chimica e L'Industria., **53**, **1971**, 259.
38. **G. A. PAGANI**, S. MAIORANA AND S. BRADAMANTE.
Stereochimica dei 3,4-dibromotiocromani-S,S-diossido.
La Chimica e L'Industria, **53**, **1971**, 363.
39. **G. A. PAGANI** AND L. VALTORTA.
Sintesi del tiocromeno[3,2-*c*]pirazolo.
Rend. Ist. Lomb. Sci. e Lett., **A105**, **1971**, 985.
40. S. BRADAMANTE, S. MAIORANA AND **G. A. PAGANI**.
Reaction of prop-2-ene-1-sulphonyl chloride with enamines: vinylthietan 1,1-dioxides and allylsulphonyl enamines as precursors of thiopyran-1,1-dioxides.
J. Chem. Soc., **1972**, 282.
41. S. BRADAMANTE, A. MARCHESINI AND **G. A. PAGANI**.
Aromatic heteroanionic species. Part I. Proton N.M.R. spectra of anions of five-membered aza-heterocycles.
J. Chem. Soc. Perkin Trans. 2, **1973**, 568.

42. S. BRADAMANTE AND **G. A. PAGANI**.
Cyclic Sulphones. Part XV. Benzo and dibenzothiopyran-S,S-dioxides "Active methylene compounds" in substitution and condensation reactions.
J. Chem. Soc. Perkin Trans. 1, **1973**, 163.
43. S. BRADAMANTE, **G. A. PAGANI**, A. MARCHESINI AND U.M. PAGNONI.
[9]meta-Heterophanes of π -deficient heteroaromatics.
La Chimica e L'Industria, **55**, **1973**, 962.
44. C. CISTARO, G. FRONZA, R. MONDELLI, S. BRADAMANTE AND **G. A. PAGANI**.
The sign of 4J in thietane sulphones and their correlation with stereochemistry.
Tetrahedron Lett., **1973**, 189.
45. G. FRONZA, A. GAMBA, R. MONDELLI AND **G. A. PAGANI**.
Sign determination of carbon-proton and proton-proton coupling constants in thiete-1,1-dioxide.
J. Magn. Resonance, **12**, **1973**, 231.
46. G. GAVIRAGHI AND **G. A. PAGANI**.
Cyclic Sulphones. Part XIV. Ionisation constants of substituted thiopyran S,S-dioxides.
J. Chem. Soc. Perkin Trans. 2, **1973**, 50.
47. A. MARCHESINI, **G. A. PAGANI** AND U.M. PAGNONI.
The stereochemical fate of the diradical intermediate in the photolysis of cyclododecen-2-one.
Tetrahedron Lett., **1973**, 1041.
48. **G. A. PAGANI**.
Cyclic Sulphones. Part XVI. Probes for conjugation of the sulphonyl group: thiopyranilidendiopyridine-S,S-dioxides.

J. Chem. Soc. Perkin Trans. 2, **1973**, 1184.

49. C. CISTARO, G. FRONZA, R. MONDELLI, S. BRADAMANTE AND **G. A. PAGANI**.
N.M.R. Study of four-membered rings. ¹H spectra and conformation of thietane-1-oxide and thietane-1,1-dioxide.
J. Magn. Resonance, **15**, **1974**, 367.
50. **G. A. PAGANI**.
Cyclic Sulphones. Part XIX. Reactions of the 1,2,6-thiadiazine-1,1-dioxide system with some electrophiles.
J. Chem. Soc. Perkin Trans. 1, **1974**, 2050.
51. **G. A. PAGANI**.
Cyclic Sulphones. Part XVII. Probes for conjugation of the sulphonyl group: thiopyrano[3,2-*b*]pyridine and -thiopyran-5,5-dioxides
J. Chem. Soc. Perkin Trans. 2, **1974**, 1389.
52. **G. A. PAGANI**.
Cyclic Sulphones. Part XVIII. Probes for conjugation of the sulphonyl group: thiopyran[3,2-*b*]quinoline-1,1-dioxides.
J. Chem. Soc. Perkin Trans. 2, **1974**, 1392.
53. F.G. BORDWELL AND **G. A. PAGANI**.
Addition, substitution, rearrangement and elimination in allylic systems.
J. Amer. Chem. Soc., **97**, **1975**, 118.
54. G. CISTARO, G. FRONZA, R. MONDELLI AND **G. A. PAGANI**.
N.M.R. Study of four-membered rings. Preferential axial orientation of groups in 3-substituted thietane-1,1-dioxides.
J. Magn. Resonance, **17**, **1975**, 219.
55. S. BRADAMANTE, F. GIANNI AND **G. A. PAGANI**.

Substituent effects in benzyl carbanions and nitrogen analogues by linear free extrathermodynamic relationships.

J. Chem. Soc. Chem. Commun., **1976**, 478.

56. S. BRADAMANTE AND **G. A. PAGANI**.
Evidence for a violation of the reactivity-selectivity principle from a study of substituent effect in π -activated arylmethylcarbanions.
J. Org. Chem., **44**, **1979**, 4735.
57. S. BRADAMANTE AND **G. A. PAGANI**.
Response to polar-inductive and mesomeric effects of contiguous substituents in parent oxygen acids XOH and nitroactivated parent carbon acids XCH₂NO₂. The phenylogy principle.
J. Org. Chem., **44**, **1979**, 4737.
58. S. BRADAMANTE AND **G. A. PAGANI**.
Substituent effect treatment of interactions between contiguous functionalities G-X. 1. Remote response to polar and inductive influence of X on G = C(sp³) and -N=.
J. Org. Chem., **45**, **1980**, 105.
59. S. BRADAMANTE AND **G.A. PAGANI**.
Substituent Effect Treatment of Interactions between Contiguous Functionalities G-X. 2. Remote Response to polar-inductive and Mesomeric Influence of X = -O- and -NH-.
J. Org. Chem., **45**, **1980**, 114.
60. S. BRADAMANTE, S. COLOMBO, **G.A. PAGANI** AND S. ROELENs.
Substituent Effect Treatment of Contiguous Functionalities. IV. Restraint to Phenyl-nitrogen Conjugative Interaction in N-functionalised N-methylanilines.
Gazz. Chim. Ital., **111**, **1981**, 357.

61. S. BRADAMANTE, S. COLOMBO, **G.A. PAGANI** AND S. ROELEN.
The Reaction of Pyruvic Acid with Amines and Aminoesters Reexamined.
Helv. Chim. Acta, **64**, **1981**, 568.
62. S. BRADAMANTE, S. COLOMBO, **G.A. PAGANI** AND S. ROELEN.
Activated C,H-Acids: N-Alkyl 9-Fluorenimines.
Helv. Chim. Acta, **64**, **1981**, 2524.
63. L. GREIFENSTEIN AND **G. A. PAGANI.**
Hydrogen bonding in carbanions and nitranions.
J. Org. Chem., **46**, **1981**, 3336.
64. L.G. GREIFENSTEIN, J.B. LAMBERT, R.I. NIENHUIS, G.E. DRUCKER AND **G.A. PAGANI.**
Response to acidity and magnetic resonance properties to aryl substitution in carbon acids and derived carbanions: 2- and 3-phenylindene.
J. Org. Chem., **46**, **1981**, 5125.
65. L.G. GREIFENSTEIN, J.B. LAMBERT, R.I. NIENHUIS, G.E. DRUCKER AND **G.A. PAGANI.**
Response of acidity and magnetic resonance properties to aryl substitution in carbon acids and derived carbanions: 1-aryl-4-phenylcyclopenta-1,3-dienes.
J. Am. Chem. Soc., **103**, **1981**, 7753.
66. S. BRADAMANTE AND **G.A. PAGANI.**
Charge-Carbon-13 empirical relationships in organic ions: an improvement extending the access to experimental charge maps.
J. Org. Chem., **49**, **1984**, 2863.
67. **G.A. PAGANI** AND G. GARDINI.
I Metalli Organici.
La Chimica e L'Industria, **66**, **1984**, 244.
68. G.D. ANDRETTI, S. BRADAMANTE, P. COSTA BIZZARRI AND **G.A. PAGANI.**

Organic Metals: *N,N*-Dicyano-1,4-benzoquinonediimines as acceptors in charge transfer complexes.

Mol. Cryst. Liq. Cryst., **120**, 1985, 309.

69. A. BERLIN, P. DELLA CASA AND **G. A. PAGANI**.
Conductivity of iodine doped oligomeric heterocyclic azomethines.
Mol. Cryst. Liq. Cryst., **118**, 1985, 413.
70. A. BERLIN AND **G. A. PAGANI**.
CNR Consiglio Nazionale delle Ricerche - Monomeri e polimeri costituiti da unita' tiofeniche e pirroliche, adatti all'ottenimento di materiali conduttori.
Domanda di Brevetto italiano depositato il 15.05.1985. (1985)
71. A. BERLIN, S. BRADAMANTE, R. FERRACCIOLI AND **G.A. PAGANI**.
Trigonal Configuration of Disulphonyl Carbanions.
J. Chem. Soc. Chem. Commun., 1986, 1191.
72. A. BERLIN, **G.A. PAGANI** AND F. SANNICOLO'.
Electroconductive Charge Transfer Complexes of 2,4,6-Tricyano-Sym-Triazine and of 3,6-Dicyano-1,2,4,5-Tetrazine with Tetrathiofulvalene.
J. Chem. Soc. Chem. Commun., 1986, 1579.
73. A. BERLIN, **G.A. PAGANI** AND F. SANNICOLO'.
New Synthetic Routes to Electroconductive Polymers Containing Thiophene units.
J. Chem. Soc. Chem. Commun., 1986, 1664.
74. S. BRADAMANTE AND **G.A. PAGANI**.
□ **Substituted Toluenes as Carbon Acids: Structural Reorganization and Free Energy Changes upon Carbanion Formation.**
J. Chem. Soc. Perkin Trans. 2, 1986, 1035.

75. S. BRADAMANTE AND **G.A. PAGANI**.
Substituent Effects in \square Substituted Carbanions.
J. Chem. Soc. Perkin Trans. 2, **1986**, 1047.
76. S. BRADAMANTE AND **G.A. PAGANI**.
Contiguous Interactions in \square Substituted Nitrogen Acids and Conjugate Nitroanions: the Role of Mesomeric and Polar Components.
J. Chem. Soc. Perkin Trans. 2, **1986**, 1055.
77. E. BARCHIESI, S. BRADAMANTE, C. CARFAGNA, R. FERRACCIOLI AND **G.A. PAGANI**.
Evaluation of the Polar-inductive and Mesomeric Effects Exerted on Contiguous Functionalities by the *N*-oxidopyridinium Groups.
J. Chem. Soc. Perkin Trans. 2, **1987**, 1009.
78. E. BARCHIESI, S. BRADAMANTE, R. FERRACCIOLI AND **G.A. PAGANI**.
Charge Demands of Electronwithdrawing Groups: Evidence for a Saturation Effect.
J. Chem. Soc. Chem. Commun., **1987**, 1548.
79. E. BARCHIESI, S. BRADAMANTE AND **G.A. PAGANI**.
Evaluation of the Polar-Inductive and Mesomeric Effects Exerted by *p*-Substituted Phenyl Rings on Contiguous Functionalities.
J. Chem. Soc. Perkin Trans. 2, **1987**, 1091.
80. A. BERLIN, S. BRADAMANTE, R. FERRACCIOLI, **G.A. PAGANI** AND F. SANNICOLO'.
Expeditious Synthesis of Dihydrobenzo[2,1-*b*:3,4-*b'*], [1,2-*b*:5,4-*b'*] and [1,2-*b*:4,5-*b'*]dipyrroles.
J. Chem. Soc. Chem. Commun., **1987**, 1176.
81. A. BERLIN, S. BRADAMANTE, R. FERRACCIOLI, **G.A. PAGANI** AND F. SANNICOLO'.
Di-Heteroarylethylenes: Synthesis and Donor Properties.
J. Chem. Soc. Perkin Trans. 1, **1987**, 2631.

82. A. BERLIN, R. FERRACCIOLI AND **G.A. PAGANI**.
Synthesis of Dipyrrol-2',2'-yl-Sulphide.
Gazz. Chim. Ital., **117**, **1987**, 507.
83. A. BERLIN, R. FERRACCIOLI, **G.A. PAGANI** AND F. SANNICOLO'.
Chemical Oxidative Polymerization of Some Benzodipyrroles to Electroconductive Materials.
Synth. Met., **22**, **1987**, 89.
84. A. BERLIN, **G.A. PAGANI** AND F. SANNICOLO'.
Electroconductive Polymers Derived from Unbridged, Hetero-Bridged, and Anellated Thiophene Units.
Synth. Met., **18**, **1987**, 157.
85. A. BERLIN, S. BRADAMANTE, R. FERRACCIOLI, **G. PAGANI**, F. SANNICOLÒ.
Semiconductors constituted of five-membered heteroarylene vinylene units: polymerization and doping.
Synth. Met., **18**, **1987**, 117-122.
86. A. BERLIN, **G.A. PAGANI** AND F. SANNICOLO'.
Non Conventional Electroconductive Charge Transfer Complexes.
Synth. Met., **19**, **1987**, 415.
87. S. BRADAMANTE, R. FERRACCIOLI AND **G.A. PAGANI**.
The reaction of Sodium 1,3-Diphenyl-2-aza propenide with Epoxycyclohexane.
J. Chem. Soc. Perkin Trans. 1, **1987**, 515.
88. M. BRAGADIN, P. CESCONE, A. BERLIN, **G.A. PAGANI** AND F. SANNICOLO'.
New Findings on Poly[(2,2'-Dithienyl-5,5'-Diylvinylene)] (PDTE).
Synth. Met., **18**, **1987**, 241.

89. S. BRADAMANTE AND **G.A. PAGANI**.
Electron and Charge Demands of Stabilizing Groups in Carbanions and Nitroanions; the NMR Approach.
Pure and Appl. Chem., **61**, **1989**, 709-716.
90. G. SCHIAVON, G. ZOTTI, A. BERLIN, **G. A. PAGANI** AND F. SANNICOLA'.
Conductive Materials from Dihydro-Benzodipyrroles.
Synth. Met., **28**, **1989**, C199.
91. G. ZOTTI, G. SCHIAVON, A. BERLIN, R. FERRACCIOLI, **G. A. PAGANI** AND F. SANNICOLA'.
Electrochemical Polymerization of some Dihydrobenzodipyrroles.
Makromol Chem., **190**, **1989**, 505.
92. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. A. PAGANI**.
The Role of Water in the Electrochemical Polymerization of Pyrroles.
Eletrochim. Acta, **34**, **1989**, 881.
93. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. A. PAGANI**.
Electrochemical Polymerization of 3-Alkylthiopyrroles.
Synth. Met., **28**, **1989**, C183.
94. E. BARCHIESI, S. BRADAMANTE, R. FERRACCIOLI AND **G.A. PAGANI**.
Experimental Charge Maps in Di-activated Carbanions: Access to Charge Demands of Primary Electron-withdrawing Functionalities.
J. Chem. Soc. Perkin Trans. 2, **1990**, 375-383.
95. A. BERLIN, **G. A. PAGANI**, G. SCHIAVON AND G. ZOTTI.
3-Thioalkyl-pyrroles: Synthesis and Oxidative Polymerization to Conductive Materials.
J. Chem. Soc. Perkin Trans. 2, **1990**, 699.

96. A. BERLIN, **G. A. PAGANI**, G. SCHIAVON AND G. ZOTTI.
Novel Conducting Polymers from Dihydrobenzodipyrroles.
Mol. Cryst. Liq. Cryst., **187**, **1990**, 193.
97. A. BERLIN, **G. A. PAGANI**, G. SCHIAVON AND G. ZOTTI.
Methyl Labelling as a Tool for Investigating the Regiochemistry of the Electrochemical Oxidative Polymerization of 1H,8H-pyrrolo[3,2-*g*]indole.
Makromol. Chem., **191**, **1990**, 1497.
98. G. ZOTTI, G. SCHIAVON, N. COMISSO, A. BERLIN AND **G. A. PAGANI**.
Electrochemical Synthesis and Characterization of Polyconjugate Polyfuran.
Makromol. Chem., **36**, **1990**, 337.
99. A. ABBOTTO, V. ALANZO, S. BRADAMANTE AND **G.A. PAGANI**.
Preparation of Heteroaryl Phenylmethanes and a ¹³C and ¹⁵N NMR Spectrometric Study of their Conjugate Carbanions. Rotational Isomerism and Charge Maps of the Anions and Ranking of the Charge Demands of the Heterocycles.
J. Chem. Soc. Perkin Trans. 2, **1991**, 481-488.
100. A. BERLIN, S. MARTINA, **G. A. PAGANI**, G. SCHIAVON AND G. ZOTTI.
Synthesis of the Parent Systems of Dipyrrolo[1,2-*a*:2',1'-*c*]pyrazine and of Dipyrrolo [1,2-*a*:2',1'-*c*]quinoxaline.
Heterocycles, **32**, **1991**, 85-92.
101. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. A. PAGANI**.
Relationship Between Conductivity and Redox Potential of Pyrrole-Based and Thiophene-Based Polyconjugated Polymers.
Synth. Met., **40**, **1991**, 299-307.
102. BERLIN, A.; MARTINA, S.; PAGANI, G..
New conducting polymers based on anellated dipyrrolyl systems

Synth. Met., **41-43**, **1991**, 363-366.

103. BERLIN, A.; MARTINA, S.; PAGANI, G.; SCHIAVON, G.; ZOTTI, G.
Anellated dipyrrolyl systems: synthesis and electrical properties of the polymers.
Lower-Dimensional Systems and Molecular Electronics **1991**, 359-362.
104. A. BERLIN, **G.A. PAGANI**, F. SANNICOLO, G. SCHIAVON AND G. ZOTTI.
Monomer Tailoring to Control the Redox Potentials of Conductive Polyheterocycles.
Polymer, **32**, **1991**, 1841-1842.
105. A. ABBOTTO, V. ALANZO, S. BRADAMANTE, **G.A. PAGANI**, C. RIZZOLI AND G. CALESTANI.
Novel Heteroaromatic and Heteroalicyclic Metal Methanates, [ML₂] (L=bis(2-Benzothiazolyl) and bis[2-(Delta-2-Thiazoliny)]).
Gazz. Chim. Ital., **121**, **1991**, 365-368.
106. A. ABBOTTO AND **G. A. PAGANI**.
Formation of Carbon Nitrogen Bonds.
Seminars in Organic Synthesis, PEC, Milano, **1991**, 8.1-8.27.
107. A. BERLIN, **G. A. PAGANI**, G. ZOTTI AND G. SCHIAVON.
Electrochemical Polymerization of 1H,7H-Pyrrolo(2',3'-4,5)-Thieno(3,2-b)Pyrrole and 4H-Dithieno(3,2-b;2',3'-d)Pyrrole.
Makromol. Chem., **193**, **1992**, 399-409.
108. C. Gatti, A. Ponti, A. Gamba and G. Pagani.
Nitranions and their precursors: charge density rearrangements and 15N NMR Chemical Shift Changes.
J. Am. Chem. Soc., **114**, **1992**, 8634-8644.
109. G. CASALBORE-MICELI, G. BEGGIATO, A. GERI, A. BERLIN, **G. A. PAGANI** AND M.A. DE-PAOLI.

Electropolymerization of Heterocycles on Poly(vinylchloride)coated Electrodes.

Mol. Cryst. Liq. Cryst., **219**, **1992**, 173-181.

110. A. BERLIN, E. BRENNNA, **G. A. PAGANI**, F. SANNICOLÒ AND G. ZOTTI
Fusion of heterocyclic polymerogenic units onto a central ring: a fruitful approach to the investigation and specific tailoring of the dependence of the electrical properties on monomer structure in conductive polyheterocycles
Synth. Met. **51**, **1992**, 287-297.
111. A. BERLIN, E. BRENNNA, **G. A. PAGANI**, F. SANNICOLÒ, G. ZOTTI AND G. SCHIAVON
Synthesis of heterocyclic monomers designed to produce conducting polymers with specific redox requisites and to evaluate stereochemical factors influencing the conductivity
Mat. Res. Soc. Symp. Proc. **247**, **1992**, 619-624.
112. A. ABBOTTO, S. BRADAMANTE AND **G. A. PAGANI**
Geometric Isomerism in Substituted 4-Picolyl Carbanions: A Probe for Ranking the Charge demands of Electron-withdrawing Groups
J. Org. Chem. **58**, **1993**, 444-448
113. A. ABBOTTO, S. BRADAMANTE AND **G. A. PAGANI**
Charge Mapping in Carbanions. Weak Charge demand of the Cyano Group As Assessed from a ¹³C NMR Study of Carbanions of □-Activated Acetonitriles and Phenylacetonitriles: Breakdown of a Myth.
J. Org. Chem. **58**, **1993**, 449-455.
114. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. A. PAGANI**
Thiophene oligomers as polythiophene models. 1. Anodic coupling of thiophene oligomers to dimers: a kinetic Investigation.
Chem. Mater. **5**, **1993**, 430-436.

115. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. A. PAGANI**
Thiophene oligomers as polythiophene models. 2. Electrochemistry and in situ ESR of end capped oligothienyls in the solid state. Evidence for \square -dimerization of hexameric polarons in polythiophene.
Chem. Mater. **5**, **1993**, 620-624.
116. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. A. PAGANI**
Thiophene oligomers as polythiophene models. 3. Conductive and capacitive behaviour of end-capped oligothienyls as thin films. A contribution to the conduction mechanism and to the faradaic-capacitive debate of conducting polymers.
Adv. Mater. **5**, **1993**, 551-554.
117. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. PAGANI**
The two stages reversible reaction of bromine with poly(dithienylvinylene)
Synth. Met. , **60**, **1993**, 179.
118. A. BERLIN, A. CANAVESI AND **G. PAGANI**
Design and synthesis of organic conductors.
Seminars in organic synthesis, PEC 293. (**1993**)
119. A. BERLIN, **G. A. PAGANI**, G. ZOTTI AND G. SCHIAVON
Conducting polymers from anodic coupling of some *N,N*-bridged-2,2'-bipyrrolyl monomers.
Makromol. Chem. **194**, **1993**, 1137.
120. G. ZOTTI, G. SCHIAVON, A. BERLIN AND **G. PAGANI**
Electrochemistry of end-capped oligothienyls. New insights into polymerization mechanism and the charge storage, conduction and capacitive properties of polythiophene.
Synth. Met. , **61**, **1993**, 81-87.

121. A. BERLIN, G. FONTANA, **G. PAGANI**, G. SCHIAVON AND G. ZOTTI
Anodic Coupling of Oligothiophenes Bridged by Ethylene Groups.
Synt. Met. , **57**, **1993**, 4796-4801
122. A G. ZOTTI, A. BERLIN, **G. PAGANI**, G. SCHIAVON AND S. ZECCHIN
Electrochemistry of polydialkylcyclopentadithiophenes - Modulation of pi dimerization by interchain spacing groups
Adv. Mater. , **6**, **1993**, 231-233
123. G. ZOTTI, G. SCHIAVON, A. BERLIN, G. FONTANA AND **G. PAGANI**
Novel, highly conducting, and soluble polymers from anodic coupling of alkyl-substituted cyclopentadithiophene monomers
Macromolecules , **27**, **1994**, 1938-1941
124. G. SCHIAVON, G. ZOTTI, N. COMISSO, A. BERLIN AND **G. PAGANI**.
Ion exchange in the electrochemical switching of polypyrroles in acetonitrile by the electrochemical quartz crystal microbalance. Electrolyte incorporation by hydrogen bonding of anions to pyrrole.
J. Phys. Chem. , **98**, **1994**, 4861-4864
125. M. INGLESII, M. NICOLA, G B. FREGNAN, S. BRADAMANTE, **G. PAGANI**.
Synthesis and free radical scavenging properties of the enantiomers of erdosteine.
Il Farmaco, **49**, **1994**,703-708.
126. G. ZOTTI, G. SCHIAVON, S. ZECCHIN, A. BERLIN AND **G. PAGANI**.
Electrochemical reduction of 4-ylidene-substituted polycyclopentadithiophenes. Polythiophene chain bridging by electrodymerization
Synth. Met., **62**, **1994**, 4861-4864
127. **G. PAGANI**.
Heterocycle-based Electric conductors

Heterocycles , **37**, **1994**, 2069-2086

128. **G. PAGANI.**
Molecular and polymeric conductors
La Chimica e l'Industria , **76**, **1994**, 344-350
129. R. MARCHELLI, R. MARINI, R. CORRADINI, A. DOSSENA AND **G. PAGANI**
Hydrolytic cleavage of supercoiled DNA by metal complexes of Benzooxazolyl- and benzothiazolyl methane-
V Congress on University and Biotechnology Innovation - Brescia 20-21/6/1994
(1994)
130. A. ABBOTTO, S. BRADAMANTE, **G. PAGANI**, H. RZEPA AND F. STOPPA.
Bispyridyl- and bisquinolymethanes. NMR-based charge mapping of the carbanions and metal ligand properties.
Heterocycles , **40**, **1994**, 757-776
131. A. ABBOTTO, S. BRADAMANTE AND **G. PAGANI.**
Diheteroarylmethanes. II. Active methylene behaviour of 2-thiazolyl and 2-oxazolyl derivatives.
Gazzetta , **124**, **1994**, 301-308
132. F. RAGAINI, M. PIZZOTTI, S. CENINI, A. ABBOTTO, **G. PAGANI** AND F. DEMARTIN.
New chelating nitrogen ligands and their application to the catalytic reduction of nitrobenzene to aniline. X-ray structure of Rh(CO)₂(BBOM) (BBOMH = bis(2-benzooxazolyl)methane)
J. Organomet. Chem. , **489**, **1995**, 107-112
133. G. ZOTTI, A. BERLIN, **G. PAGANI**, G. SCHIAVON AND S. ZECCHIN.
Conductivity in Redox Modified Conducting Polymers. In situ conductivity of Poly(Cyclopentadithiophenes) bearing p-Nitrophenyl and 4-N-Methylpyridinium Groups-

Adv. Mat., **7**, **1995**, 48-52

134. G. ZOTTI, G. SCHIAVON, S. ZECCHIN, A. BERLIN, **G. PAGANI** AND A. CANAVESI.
Conductivity in Redox Modified Conducting Polymers . 2. Enhanced Redox Conductivity in Ferrocene-Substituted Polypyrroles and Polythiophenes-
Chem. Mat., **7**, **1995**, 2309-2315
135. S. BRADAMANTE, A. FACCHETTI AND **G. PAGANI**.
Diheteroarylmethanes. Part 4. Oxidations and metal promoted coupling reactions of bis(benzoheteroaryl)methanes
Gazz. Chim. Ital., **126**, **1996**, 329-337
136. A. ABBOTTO, S. BRADAMANTE AND **G. A. PAGANI**.
Diheteroarylmethanes. 5 Carbanions Substituted by Heterocyclic 1,3-Azoles: E - Z Isomerism and Charge Mapping by 13C and 15N -Charge/Shift Relationships-
J. Org. Chem., **61**, **1996**, 1761-1769
137. A. BERLIN, A. CANAVESI, **G. PAGANI**, G. SCHIAVON, S. ZECCHIN, G. ZOTTI.
2,2'-Spaced-Dipyrroles: Electronic and Steric Effects of the Spacers on Bandgaps and Conductivities of the Corresponding Polymers
Material Research Society Symposium Proceedings, **1996**, 631.
138. G. ZOTTI, G. SCHIAVON, S. ZECCHIN, A. BERLIN, **G. PAGANI**, A. CANAVESI.
Mixed-Valence Conduction in Redox-Substituted Polythiophenes. Enhancement of Redox Electron-Exchange Rate by Polyconjugated Chains.
Synthetic Metals, **76**, **1996**, 255-.
139. G. ZOTTI, S. ZECCHIN, G. SCHIAVON, A. BERLIN, **G. PAGANI**, A. CANAVESI, G. CASALBORE-MICELI
Synthesis and Characterization of Polyazopyrrole. A Novel Narrow-Bandgap Polypyrrole with Proton-Exchange Properties.
Synthetic Metals, **78**, **1996**, 51.

140. G. BEGGIATO, G. CASALBORE-MICELI, A. GERI, A. BERLIN, **G. PAGANI**.
Electrochemical Preparation and Characteristics of Dithienopyrrole-dithienothiophene, Dithenopyrrole-thionaphtheneindole and Dithienothiophene-thionaphtheneindole Copolymers.
Synthetic Metals, **82**, **1996**, 11.
141. S. BRADAMANTE AND **G. PAGANI**.
Benzyl and Heteroarylmethyl Carbanions: Structure and Substituents Effects in Advances in Carbanion Chemistry, V. Snieckus Ed.
JAI Press, **1996**, 189-263.
142. **G. PAGANI**, A. BERLIN, A. CANAVESI, G. SCHIAVON, S. ZECCHIN, G. ZOTTI.
Poly(2,2'-Spaced-Dipyrroles): Bandgap Contraction by Additive and Charge-Transfer Mechanism".
Advanced Materials, **8**, **1996**, 819-823.
143. S. BRADAMANTE, A. FACCHETTI, AND **G. A. PAGANI**.
Heterocycles as Donor and Acceptor Units in Push-pull Conjugated Molecules. Part I
J. Phys. Org. Chem. **10**, **1997**, 5214-524.
144. A. ABBOTTO, S. BRADAMANTE, A. FACCHETTI AND **G. A. PAGANI**.
Facile, regioselective synthesis of highly solvatochromic thiophene-spaced N-alkylpyridinium dicyanomethanides for second-harmonic generation.
J. Org. Chem., **62**, **1997**, 5755-5765.
145. R. RICCERI, A. ABBOTTO, A. FACCHETTI, **G. A. PAGANI** AND G. GABRIELLI.
Langmuir-Blodgett films of a new pyridinium-dicyanomethanide dye and their potential optical applications.
Langmuir, **13**, **1997**, 3434-3437.

146. G. S. HE, L. X. YUAN, P. N. PRASAD, A. ABBOTTO, A. FACCHETTI AND **G. A. PAGANI**.
Two-photon pumped frequency-upconversion lasing of a new blue-green dye material
Optic. Commun., **140**, **1997**, 49-52.
147. R. RICCERI, A. ABBOTTO, A. FACCHETTI, **G. A. PAGANI** AND G. GABRIELLI.
A first study of Langmuir-Blodgett films of 1-[N-(n-hexadecyl)-4-pyridinio]-2-[5-(dicyanomethanidyl)thien-2-yl]ethene.
Langmuir, **13**, **1997**, 4182-4184.
148. A. ABBOTTO, A. FACCHETTI, **G. A. PAGANI**, L. X. YUAN AND P. N. PRASAD.
Enhanced second-order optical non-linearity of thiophene-spaced N-alkylpyridinium malononitrile zwitterions.
Gazz. Chim. Ital., **127**, **1997**, 165-166.
149. R. RICCERI, D. GRANDO, A. ABBOTTO, A. FACCHETTI, **G. A. PAGANI** AND G. GABRIELLI.
Aggregated structures in Langmuir-Blodgett films of pyridinium-dicyanomethanide dyes.
Langmuir, **13**, **1997**, 5787-5790.
150. G. ZOTTI, G. SCHIAVON, S. ZECCHIN, A. BERLIN, **G. PAGANI**, A. CANAVESI.
Self-Assembly of Pyrrolyl- and Cyclopentadithiophene-4-yl-*n*-hexylferrocene on ITO Electrodes and Their Anodic Coupling to Polyconjugated Polymer Layers
Langmuir, **13**, **1997**, 2694-2698.
151. G. ZOTTI, G. SCHIAVON, S. ZECCHIN, A. BERLIN, A. CANAVESI, **G. PAGANI**.
Self-assembly and Electropolymerization of Pyrrole- and Bithiophene-*n*-hexyl-ferrocene Molecules on ITO Electrodes.
Synthetic Metals, **84**, **1997**, 239-240.
152. G. ZOTTI, S. ZECCHIN, G. SCHIAVON, A. BERLIN, **G. PAGANI**, M. BORGONOVO.

Polyconjugated Polymers from Anodic Coupling of Dipyrrrole-ethylenes-arylenes and -Heteroarylenes. Narrow Potential Windows of Conductivity by Alternation of Electron-rich and Electron-poor Units

Chem. Mat., **9**, **1997**, 2876-2886.

153. G. ZOTTI, S. ZECCHIN, G. SCHIAVON, A. BERLIN, **G. PAGANI**, A. CANAVESI.
Doping-induced Ion-exchange in the Highly Conjugated Self-doped Polythiophene from Anodic Coupling of 4-(4*H*-Cyclopentadithien-4-yl)butanesulfonate.
Chem. Mat., **9**, **1997**, 2940 .
154. BERLIN, A. CANAVESI, **G. PAGANI**, G. SCHIAVON, S. ZECCHIN, G. ZOTTI.
Low Band-gap Pyrrole-based Conducting Polymers.
Synthetic Metals, **84**, **1997**, 451-452.
155. A. ABBOTTO, S. BRADAMANTE, A. FACCHETTI, **G. A. PAGANI**, I. LEDOUX AND J. ZYSS.
Very large second order non-linear optical activity shown by heterocycle-based dicyanomethanide zwitterions.
Proc. Mat. Res. Soc. Symp., **488**, **1998**, 819-822.
156. G. ZOTTI, M. MUSIANI, S. ZECCHIN, G. SCHIAVON, A. BERLIN, **G. PAGANI**.
Electrochemical Synthesis of Pyrrole within Poly(4-butanesulfonate-cyclopentadithiophene) Films. A 1:1 Stoichiometric Polypyrrole-polithiophene Composite.
Chem. Mat., **10**, **1998**, 480-485.
157. A. ABBOTTO, A. FACCHETTI, S. BRADAMANTE AND **G. A. PAGANI**.
8-PurinyI versus 2-Beenzimidazolyl Carbanions: Charge demands of the Heterocycles and Ligand Properties of the Bis(heteroaryl)methanes.
J. Org. Chem., **63**, **1998**, 436-444.
158. G. ZOTTI, G. SCHIAVON AND S. ZECCHIN; A. BERLIN AND **G. A. PAGANI**.

**Adsorption of ferrocene compounds on indium-tin-oxide electrodes.
Enhancement of adsorption by decomposition of ferrocenium molecules by oxygen**

Langmuir, **14**, 1998, 1728-1733.

159. R. RICCERI, C. NETO, A. ABBOTTO, A. FACCHETTI AND **G. A. PAGANI**.

Morphological characterization of H aggregates in Langmuir-Blodgett films of pyridinium-dicyanomethanide dyes.

Langmuir, **15**, 1999, 2149-2151.

160. R. RICCERI, A. ABBOTTO, A. FACCHETTI, **G. A. PAGANI** AND G. GABRIELLI.

Information storage based on photochemical effects in mixed Langmuir-Blodegett films.

Thin Solid Films, **340**, 1999, 218-220.

161. A. ABBOTTO, A. FACCHETTI, S. BRADAMANTE AND **G. A. PAGANI**.

Diheteroarylmethanes. 8. Mapping Charge and Electron-withdrawing Power of the 1,2,4-triazol-5-yl Substituent.

J. Org. Chem., **64**, 1999, 6756-6763.

162. A. ABBOTTO, P. FERRUTI, M. GILBERTI AND **G. A. PAGANI**.

Incorporation of highly efficient second- and third-order nonlinear optical chromophores into poly(amido-amine) backbones.

SPIE Proc., **3796**, 1999, 328-335.

163. A. ABBOTTO, R. BOZIO, G. BRUSATIN, A. FACCHETTI, M. GUGLIELMI, P. INNOCENZI, M. MENEGHETTI, **G. A. PAGANI** AND R. SIGNORINI.

Novel hybrid organic-inorganic sol-gel materials based on highly efficient heterocyclic push-pull chromophores.

SPIE Proc., **3803**, 1999, 18-25.

164. R. RICCERI, A. ABBOTTO, A. FACCHETTI, D. GRANDO, G. GABRIELLI AND **G. A. PAGANI**.

Langmuir-Blodgett films of pyridinium-dicyanomethanide dyes mixtures with photobleachable absorption bands.

Colloid Surf. A-Physicochem. Eng. Asp., **150**, **1999**, 289-296.

165. A. ABBOTTO, S. BRUNI, F. CARIATI AND **G. A. PAGANI**.

A Spectroscopic and magnetic study of complexes of bis(2-benzothiazolyl)methanate and bis(2-benzoxazolyl)methanate with Co(II), Ni(II), Cu(II), and Zn(II).

Spectrochimica Acta Part A **2000**, 1543-1552.

166. ABBOTTO, A. BEVERINA, L. BRADAMANTE, S. BOZIO, R. FERRANTE, C. **PAGANI, G A.** SIGNORINI, R.

Push-Pull Organic Chromophores for Frequency-Upconverted Lasing

Adv. Mat. **2000**, 1963-1967.

167. ABBOTTO, A. BOZIO, R. **PAGANI, G A.**

Composti eteroaromatici ad elevata prestazione come limitatori ottici in soluzione tramite assorbimento a due fotoni

brevetto italiano(n. domanda MI2000A000612) **2000**

168. A. FACCHETTI AND **G. A. PAGANI**.

Nuovi materiali da molecole organiche

Le Scienze quaderni, **2000**, 115, 21-27.

169. ABBOTTO, A. BRADAMANTE, S. **PAGANI, G A.**

Pyridoneimines and Pyridonemethides: Substituent and Solvent Tunable Intramolecular Charge Transfer and Geometric Isomerism

J. Org. Chem. **2001**, 8883-8892.

170. ABBOTTO, A. BEVERINA, L. BOZIO, R. BRADAMANTE, S. **PAGANI, G. A.** SIGNORINI, R.

Heterocycle-based materials for frequency-upconverted lasing.

Synth. Metals **2001**, 121, 1755-1756.

171. ABBOTTO, A. BOZIO, R. **PAGANI, G A.**
Heteroaromatic Compounds Having Two-Photon Absorption Activity
WO 0170735 A1 20010927 AN 2001:713344, PCT Int. Appl. **2001**
172. ABBOTTO, A. BEVERINA, L. BRADAMANTE, S. FACCHETTI, A. **PAGANI, G A.**
Organic Materials for Photonics
SIAMIC 2000 Proc. **2001**
173. BRUSATIN, G. MIORIN, E. INNOCENZI, P. ABBOTTO, A. BEVERINA, L. **PAGANI, G A.**; CASALBONI, M. SARCINELLI, F. PIZZOFEERRATO, M.
Hybrid sol-gel materials and heterocycle-based push-pull chromophores as solid state systems for photonic applications
SIAMIC 2000 Proc. **2001**
174. FACCHETTI, A. VAN DER BOOM, M E. ABBOTTO, A. BEVERINA, L. MARKS, T J. **PAGANI, G A.**
Design and Preparation of Zwitterionic Organic Thin-Fims: Self-Assembled Siloxane-Based Thiophene-Spaced N-Benzylpyridinium Dicyanomethanides as Nonlinear Optical Materials
Langmuir, **2001** 5939-5942
175. **PAGANI, G A.** MARKS, T J. ABBOTTO, A. BEVERINA, L. VAN DER BOOM, M E. BRADAMANTE, S. FACCHETTI, A.
Novel Heterocycle-Based Dyes for Photonics: Effect of Self-Assembling, Pyridine Annulation, and Medium on Molecular Response
Polym. Prepr. **2001**, 567-568
176. ABBOTTO, A. BEVERINA, L. BOZIO, R. FACCHETTI, A. FERRANTE, C. **PAGANI, G A.** PEDRON, D. SIGNORINI R.
Novel Heterocycle-Based Two-Photon Absorbing Dyes.
Org. Letts **2002**, 4, 1495-1498.
177. FACCHETTI, A. ABBOTTO, A. BEVERINA, L. VAN DER BOOM, M E. MARKS, T J. **PAGANI, G A.**

Self-Assembled Heterocycle-Based Films. Layer-By-Layer Fabrication Of Highly Transparent Superlattices

Polym. Prepr. **2002**, 1292-1293.

178. A Abbotto, A.; Bradamante, S.; Facchetti, A.; **Pagani, G A.**
Metal Chelation Aptitudes of Bis(o-azaheteroaryl)methanes As Tuned by Heterocycle Charge Demands.
J Org. Chem. **2002**, 67, 5753-5772.
179. FACCHETTI, A. ABBOTTO, A. BEVERINA, L. VAN DER BOOM, M E. MARKS, T J. **PAGANI, G A.**
Self-Assembled Heterocycle-Based Films. Evidence Of The High Donor Efficiency Of The Pyrrol-2-yl Group In Push-Pull Chromophores
Polym. Prepr. **2002**, 43, 459-460.
180. INNOCENZI P., MIORIN E., BRUSATIN G., ABBOTTO A., BEVERINA L., **PAGANI G.**, CASALBONI M., SARCINELLI F. AND PIZZOFERRATO R.
Incorporation of switterionic push-pull chromophores into hybrid organic-inorganic matrixes.
Chem Mater **2002**, 14, 3758-3766.
181. FACCHETTI A.; ABBOTTO, A.; BEVERINA, L.; VAN DER BOOM, M.E.; DUTTA, P.; EVMENENKO, G.; MARKS T.J. ; **PAGANI, G.A.**
Azinium-((-bridge)-pyrrole NLO-phores: influence of heterocycle acceptors on chromoforic and self-assembled thin-film properties.
Chem Mater **2002**, 14, 4996-5005.
182. INNOCENZI P., BRUSATIN G., ABBOTTO A., BEVERINA L., PAGANI G., CASALBONI M., SARCINELLI F. AND PIZZOFERRATO R.
Entrapping of push-pull zwitterionic chromophores in hybrid matrices for photonic applications.
J Sol-Gel Science and Techn. **2003**, 26, 1-4.

183. ABBOTTO, A.; BEVERINA, L.; BRADAMANTE, S.; FACCHETTI, A.; KLEIN, C.; **PAGANI, G A.**; REDI-ABSHIRO, M.; WORTMANN, R.
A distinctive example of the cooperative interplay of structure and environment in tuning of intramolecular charge transfer in second-order nonlinear optical chromophores.
Chemistry--A European Journal **2003**, *9*, 1991-2007.
184. ABBOTTO, A.; BEVERINA, L.; CHIRICO, G.; FACCHETTI, A.; FERRUTI, P.; GILBERTI, M.; **PAGANI, G A.**
Crosslinked poly(amido-amine)s as superior matrices for chemical incorporation of highly efficient organic nonlinear optical dyes.
Macromol. Rapid Commun. **2003**, *24*, 397-402.
185. FACCHETTI, A.; ABBOTTO, A.; BEVERINA, L.; VAN DER BOOM, M E.; MARKS, T J.; **PAGANI, G A.**
Self-assembled heterocycle-based films. Properties of novel pyridine-pyrrole chromophores anchored to functionalized siliceous substrates.
Polymer Preprints **2003**, *44*, 1171-1172.
186. ABBOTTO, A.; BEVERINA, L.; FACCHETTI, A.; FERRUTI, P.; GHILBERTI, M.; **PAGANI, G A.**
Incorporation of efficient NLO-phores into crosslinked poly(amino-amide) matrixes.
Polymer Preprints **2003**, *44*, 1006-1007.
187. ABBOTTO, A.; BEVERINA, L.; **PAGANI, G A.** COLLINI, M.; CHIRICO, G.; D'ALFONSO, L.; BALDINI, G..
Novel efficient and stable heteroaromatic two-photon absorbing dyes
SPIE Proc., *5139*, **2003**, 223-230.
188. ABBOTTO, A.; BEVERINA, L.; BRUSATIN, G.; CASALBONI, M.; INNOCENZI, P.; **PAGANI, G A.**; SARCINELLI, F..
Materiale ibrido organico-inorganico a risposta ottica non-lineare a base di cromofori organici e procedimento di preparazione del medesimo
Domanda di brevetto italiano, **2003**

189. ABBOTTO, A.; BEVERINA, L.; CHIRICO, G.; FACCHETTI, A.; FERRUTI, P.; **PAGANI, G A.**
Design and synthesis of new functional polymers for nonlinear optical applications
Synth. Metals **2003**, *139*, 629-632.
190. ABBOTTO, A.; BEVERINA, L.; BOZIO, R.; BRADAMANTE, S.; FACCHETTI, A.; FERRANTE, C.; **PAGANI, G A.**; PEDRON, D.; SIGNORINI, R..
Novel heterocycle-based two-photon absorbing dyes
NATO Science Ser. II, **2003**, *100*, 385-393.
191. SIGNORINI, R.; FERRANTE, C.; PEDRON, D.; SLAVIERO, M.; BOZIO, R.; ABBOTTO, A.; BEVERINA, L.; **PAGANI, G A.**
Highly efficient multiphoton absorption in a new quadrupolar heterocyclic dye
NATO Science Ser. II, **2003**, *100*, 231-240.
192. ABBOTTO, A.; BEVERINA, L.; BOZIO, R.; FACCHETTI, A.; FERRANTE, C.; **PAGANI, G A.**; PEDRON, D.; SIGNORINI, R..
Novel heteroaromatic-based multi-branched dyes with enhanced two-photon absorption activity
Chem. Commun., **2003**, *17*, 2144-2145.
193. FACCHETTI, A.; ABBOTTO, A.; BEVERINA, L.; VAN DER BOOM, M.E.; DUTTA, P. EVMENENKO, G.; MARKS, T.J.; **PAGANI, G.A.**
Layer-by-layer self-assembled pyrrole-based donor-acceptor chromophores as electro-optic materials
Chem Mater **2003**, *15*, 1064-1072.
194. SIGNORINI, R. PEDRON, D.; FERRANTE, C.; BOZIO, R.; BRUSATIN G., INNOCENZI P., DALLA NEGRA, F.; MAGGINI, M.; ABBOTTO, A.; BEVERINA, L.; **PAGANI, G A.**
Optical limiting based on multiphoton processes in carbon nanostructures and heterocyclic quadrupolar molecules

SPIE Proc., 4797, **2003**,1-14.

195. ABBOTTO, A.; BEVERINA, L.; BRADAMANTE, S.; FACCHETTI, A.; **PAGANI, G A.**; BOZIO, R.; FERRANTE, C.; PEDRON, D.; SIGNORINI, R..
Design and synthesis of heterocyclic multi-branched dyes for two-photon absorption
Synth. Metals **2003**, 139(3), 795-797.
196. D'ALFONSO, L.; CHIRICO, G.; COLLINI, M.; BALDINI, G.; DIASPRO, A.; RAMOINO, P.; ABBOTTO, A.; BEVERINA, L.; **PAGANI, G.A.**
New two-photon excitation chromophores for cellular imaging
SPIE Proc., 5139, **2003**, 27-35.
197. BRUSATIN, G.; INNOCENZI, P.; ABBOTTO, A.; BEVERINA, L.; **PAGANI, G A.**; CASALBONI, M.; SARCINELLI, F.; PIZZOFRERATO, R..
Hybrid organic-inorganic materials containing poled zwitterionic push-pull chromophores
Journal of the european ceramic society, 24, **2004**, 1853-1856.
198. BRUSATIN, GIOVANNA; ABBOTTO, ALESSANDRO; BEVERINA, LUCA; **PAGANI, GIORGIO A.**; CASALBONI, MAURO; SARCINELLI, FELICE; INNOCENZI, PLINIO.
Poled sol-gel materials with heterocycle push-pull chromophores that confer enhanced second-order optical nonlinearity
Adv. Funct. Mater. **2004**, 14, 1160-1166.
199. SARCINELLI, F; ABBOTTO, A.; BEVERINA, L.; **PAGANI, G.**; BRUSATIN, G.; INNOCENZI, P.; CASALBONI, M.
Hybrid organic-inorganic material with nonlinear optical response based on organic chromophores and process for the preparation thereof
PCT Int. Appl. **2004**, 23 pp. WO 2004092820.
200. ABBOTTO, ALESSANDRO; BEVERINA, LUCA; BOZIO, RENATO; **PAGANI, GIORGIO A.**; SIGNORINI, RAFFAELLA.

Two-photon absorption heteroaromatic chromophores and composition thereof.

PCT Int. Appl. (2004), 23 pp. WO 2004/018456.

201. FACCHETTI, ANTONIO; ABBOTTO, ALESSANDRO; BEVERINA, LUCA; BRADAMANTE, SILVIA; MARIANI, PALMA; STERN, CHARLOTTE L.; MARKS, TOBIN J.; VACCA, ALBERTO; **PAGANI, GIORGIO A.**

Novel coordinating motifs for lanthanide(III) ions based on 5-(2-pyridyl)tetrazole and 5-(2-pyridyl-1-oxide)tetrazole. Potential new contrast agents.

Chem. Comm. (2004), (15), 1770-1771.

202. BRUSATIN, GIOVANNA; INNOCENZI, PLINIO; GUGLIELMI, MASSIMO; ABBOTTO, ALESSANDRO; BEVERINA, LUCA; **PAGANI, GIORGIO A.**; CASALBONI, MAURO; SARCINELLI, FELICE.

Poled sol-gel materials doped with heterocycle-based push-pull chromophores with second-order optical non-linearity.

Journal of Non-Crystalline Solids (2004), 345 & 346 575-579.

203. FACCHETTI, ANTONIO; ANNONI, ELISABETTA; BEVERINA, LUCA; MORONE, MARIKA; ZHU, PEIWANG; MARKS, TOBIN J.; **PAGANI, GIORGIO A.**

Very large electro-optic responses in H-bonded heteroaromatic films grown by physical vapor deposition.

Nature Materials (2004), 3(12), 910-917.

204. FACCHETTI, ANTONIO; ANNONI, ELISABETTA; BEVERINA, LUCA; MORONE, MARIKA; ZHU, PEIWANG; MARKS, TOBIN J.; **PAGANI, GIORGIO A.**

Vapor-phase fabrication of H-bonding molecular networks exhibiting very large electro-optic responses.

Abstracts of Papers, 229th ACS National Meeting, San Diego, CA, United States, March 13-17, 2005 (2005), PHYS-475.

205. ABBOTTO, ALESSANDRO; BALDINI, GIANCARLO; BEVERINA, LUCA; CHIRICO, GIUSEPPE; COLLINI, MADDALENA; D'ALFONSO, LAURA; DIASPRO, ALBERTO; MAGRASSI, RAFFAELLA; NARDO, LUCA; **PAGANI, GIORGIO A.**
Dimethyl-pep: a DNA probe in two-photon excitation cellular imaging.
Biophysical Chemistry (**2005**), *114(1)*, 35-41.
206. BEVERINA, LUCA; ABBOTTO, ALESSANDRO; LANDENNA, MIRKO; CERMINARA, MICHELE; TUBINO, RICCARDO; MEINARDI, FRANCESCO; BRADAMANTE, SILVIA; **PAGANI, GIORGIO A.**
New □ -Extended Water-Soluble Squaraines as Singlet Oxygen Generators
Organic Letters (**2005**), *7(19)*, 4257-4260.
207. MORONE, MARIKA; BEVERINA, LUCA; ABBOTTO, ALESSANDRO; **PAGANI, GIORGIO A.**
Frontiers in biophotonics: heterocycle-based photosensitizers for photodynamic therapy (PDT).
Targets in Heterocyclic Systems (**2005**), *9* 66-86.
208. FACCHETTI, ANTONIO; BEVERINA, LUCA; VAN DER BOOM, MILKO E.; DUTTA, PULAK; EVMENENKO, GUENNADI; SHUKLA, ATINDRA D.; STERN, CHARLOTTE E.; **PAGANI, GIORGIO A.**; MARKS, TOBIN J.
Strategies for Electrooptic Film Fabrication. Influence of Pyrrole-Pyridine-Based Dibranching Chromophore Architecture on Covalent Self-Assembly, Thin-Film Microstructure, and Nonlinear Optical Response.
Journal of the American Chemical Society (**2006**), *128(6)*, 2142-2153.
209. MORONE, MARIKA; BEVERINA, LUCA; ABBOTTO, ALESSANDRO; SILVESTRI, FABIO; COLLINI, ELISABETTA; FERRANTE, CAMILLA; BOZIO, RENATO; **PAGANI, GIORGIO A.**
Enhancement of Two-Photon Absorption Cross-Section and Singlet-Oxygen Generation in Porphyrins upon □ -Functionalization with Donor-Acceptor Substituents.
Organic Letters (**2006**), *8(13)*, 2719-2722.
210. DELLA GIUSTINA, GIOIA; BRUSATIN, GIOVANNA; GUGLIELMI, MASSIMO; DISPENZA, MASSIMILIANO; FIORELLO, ANNA MARIA; VARASI, MAURO; CASALBONI, MAURO; QUATELA, ALESSIA; DE MATTEIS, FABIO;

GIORGETTI, EMILIA; MARGHERI, GIANCARLO; INNOCENZI, PLINIO; ABBOTTO, ALESSANDRO; BEVERINA, LUCA; **PAGANI, GIORGIO A.**

Electro-optics poled sol-gel materials doped with heterocycle push-pull chromophores.

Materials Science & Engineering, C: Biomimetic and Supramolecular Systems (2006), 26(5-7), 979-982.

211. VERSARI, SILVIA; VILLA, ANNA MARIA; VILLA, ALESSANDRO; DOGLIA, SILVIA MARIA; **PAGANI, GIORGIO A.**; BRADAMANTE, SILVIA.

Novel nontoxic mitochondrial probe for confocal fluorescence microscopy.

Journal of Biomedical Optics (2006), 11(3), 034014/1-034014/4.

212. CHUNG, SUNG-JAE; ZHENG, SHIJUN; ODANI, TORU; BEVERINA, LUCA; FU, JIE; PADILHA, LAZARO A.; BIESSO, ARIANNA; HALES, JOEL M.; ZHAN, XIAOWEI; SCHMIDT, KARIN; YE, AIJUN; ZOJER, EGBERT; BARLOW, STEPHEN; HAGAN, DAVID J.; VAN STRYLAND, ERIC W.; YI, YUANPING; SHUAI, ZHIGANG; **PAGANI, GIORGIO A.**; BREDAS, JEAN-LUC; PERRY, JOSEPH W.; MARDER, SETH R.

Extended Squaraine Dyes with Large Two-Photon Absorption Cross-Sections

Journal of the American Chemical Society (2006), 128(45), 14444-14445.

213. ABBOTTO, ALESSANDRO; BRADAMANTE, SILVIA; BEVERINA, LUCA; **PAGANI, GIORGIO.**

Use of fluorophores for the selective localisation of mitochondria.

PCT Int. Appl. (2007), 23pp.

214. PROUTIERE, SEVERINE; FERRUTI, PAOLO; UGO, RENATO; ABBOTTO, ALESSANDRO; BOZIO, RENATO; COZZUOL, MATTEO; DRAGONETTI, CLAUDIA; EMILITRI, ELISA; LOCATELLI, DANIKA; MARINOTTO, DANIELE; **PAGANI, GIORGIO**; PEDRON, DANILO; ROBERTO, DOMINIQUE.

A three steps procedure (swelling-poling-deswelling) to produce a stable alignment of second order NLO-phores covalently attached to a cross-linked polymeric network.

Materials Science & Engineering, B: Solid-State Materials for Advanced Technology (2008), 147(2-3), 293-297.

215. CELIK, AYSE; POSSET, UWE; SCHOTTNER, GERHARD; **PAGANI, GIORGIO**; RUFFO, RICCARDO; BEVERINA, LUCA; MARI, CLAUDIO MARIA; PATRIARCA, GIORGIO; ABBOTTO, ALESSANDRO.
Highly transparent electrochromic coating material, method for producing the same and use of the material.
PCT Int. Appl. (2008), 52 pp.
216. BEVERINA, LUCA; CRIPPA, MAURIZIO; LANDENNA, MIRKO; RUFFO, RICCARDO; SALICE, PATRIZIO; SILVESTRI, FABIO; VERSARI, SILVIA; VILLA, ALESSANDRO; CIAFFONI, LUCA; COLLINI, ELISABETTA; FERRANTE, CAMILLA; BRADAMANTE, SILVIA; MARI, CLAUDIO M.; BOZIO, RENATO; **PAGANI, GIORGIO A.**
Assessment of Water-Soluble \square -Extended Squaraines as One- and Two-Photon Singlet Oxygen Photosensitizers: Design, Synthesis, and Characterization.
Journal of the American Chemical Society (2008), 130(6), 1894-1902.
217. SIGNORINI, RAFFAELLA; FERRANTE, CAMILLA; PEDRON, DANILO; ZERBETTO, MICHELE; CECCHETTO, ELIO; SLAVIERO, MATTEO; FORTUNATI, ILARIA; COLLINI, ELISABETTA; BOZIO, RENATO; ABBOTTO, ALESSANDRO; BEVERINA, LUCA; **PAGANI, GIORGIO A.**
Effective two-photon absorption cross section of heteroaromatic quadrupolar dyes: Dependence on measurement technique and laser pulse characteristics.
Journal of Physical Chemistry A (2008), 112(18), 4224-4234.
218. BEVERINA, LUCA; CRIPPA, MAURIZIO; SALICE, PATRIZIO; RUFFO, RICCARDO; FERRANTE, CAMILLA; FORTUNATI, ILARIA; SIGNORINI, RAFFAELLA; MARI, CLAUDIO MARIA; BOZIO, RENATO; FACCHINETTI, ANTONIO; **PAGANI, GIORGIO A.**
Indolic Squaraines as Two-Photon Absorbing Dyes in the Visible Region: X-ray Structure, Electrochemical, and Nonlinear Optical Characterization.
Chemistry of Materials (2008), 20(10), 3242-3244.
219. SILVESTRI, FABIO; IRWIN, MICHAEL D.; BEVERINA, LUCA; FACCHETTI, ANTONIO; PAGANI, GIORGIO A.; MARKS, TOBIN J..
Efficient Squaraine-Based Solution Processable Bulk-Heterojunction Solar Cells
Journal of The American Chemical Society (Communication) (2008), 130(52), 17640-17641.

220. ABBOTTO, ALESSANDRO; BEVERINA, LUCA; MANFREDI, NORBERTO; **PAGANI, GIORGIO A.**; ARCHETTI, GRAZIANO; KUBALL, HANS-GEORG; WITTENBURG, CHRISTIAN; HECK JUERGEN; HOLTMANN, JAN.
Second-Order Nonlinear Optical Activity of Dipolar Chromophores Based on Pyrrole-Hydrazono Donor Moieties.
Chemistry--A European Journal (**2009**), 15(25), 6175-6185.
221. BEVERINA, LUCA; RUFFO, RICCARDO; MARI, CLAUDIO MARIA; **PAGANI, GIORGIO A.**; SASSI, MAURO; DE ANGELIS, FILIPPO; FANTACCI, SIMONA; YUM, JUN-HO; GRAETZEL, MICHAEL; NAZEERUDDIN, MOHAMMAD K.
Panchromatic Cross-Substituted Squaraines for Dye-Sensitized Solar Cell Applications.
ChemSusChem (**2009**), 2(7), 621-624.
222. SILVESTRI, FABIO; LOPEZ-DUARTE, ISMAEL; SEITZ, WOLFGANG; BEVERINA, LUCA; MARTINEZ-DIAZ, M. VICTORIA; MARKS, TOBIN J.; GULDI, DIRK M.; **PAGANI, GIORGIO A.**; TORRES, TOMAS.
A squaraine-phthalocyanine ensemble: towards molecular panchromatic sensitizers in solar cells.
Chemical Communications (Cambridge, United Kingdom) (**2009**), (30), 4500-4502.
223. BEVERINA, LUCA; CRIPPA, MAURIZIO; SASSI, MAURO; MONGUZZI, ANGELO; MEINARDI, FRANCESCO; TUBINO, RICCARDO; **PAGANI, GIORGIO A.**
Perfluorinated nitrosopyrazolone-based erbium chelates: a new efficient solution processable NIR emitter.
Chemical Communications (Cambridge, United Kingdom) (**2009**), (34), 5103-5105.
224. BEVERINA, LUCA; RUFFO, RICCARDO; PATRIARCA, GIORGIO; DE ANGELIS, FILIPPO; ROBERTO, DOMINIQUE; RIGHETTO, STEFANIA; UGO, RENATO; **PAGANI, GIORGIO A.**
Second harmonic generation in nonsymmetrical squaraines: tuning of the directional charge transfer character in highly delocalized dyes.
Journal of Materials Chemistry (**2009**), 19(43), 8190-8197.

225. BRÖKER, BENJAMIN; BLUM, RALF-PETER; BEVERINA, LUCA; HOFMANN, OLIVER T.; SASSI, MAURO; RUFFO, RICCARDO; **PAGANI, GIORGIO A.**; HEIMEL, GEORG; VOLLMER, ANTJE; FRISCH, JOHANNES; RABE, JÜRGEN P.; ZOJER, EGBERT; KOCH, NORBERT.
A High Molecular Weight Donor for Electron Injection Interlayers on Metal Electrodes.
ChemPhysChem (**2009**), 10(17), 2947-2954.
226. BINDA, M.; FIORINI, C.; IACCHETTI, A.; NATALI, D.; PECUNIA, V.; PELOSO, R.; SAMPIETRO, M.; BEVERINA, L.; **PAGANI, G.**
Squaraine-based organic photodetector coupled to a scintillating crystal for X-ray sensing applications
Nuclear Science Symposium Conference Record, Orlando, FL, United States, Oct. 24-Nov. 1, 2009 (**2009**), 1970-1973.
227. SALICE, PATRIZIO; ARNBJERG, JACOB; WETT PEDERSEN, BRIAN; TOFTEGAARD, RASMUS; BEVERINA, LUCA; **PAGANI, GIORGIO A.**; OGILBY, PETER R..
Photophysics of Squaraine Dyes: Role of Charge-Transfer in Singlet Oxygen Production and Removal.
Journal of Physical Chemistry A (**2010**), 114(7), 2518-2525.
228. RAPOZZI, VALENTINA; BEVERINA, LUCA; SALICE, PATRIZIO; **PAGANI, GIORGIO A.**; CAMERIN, MONICA; XODO, LUIGI E..
Photooxidation and Phototoxicity of n-Extended Squaraines.
Journal of Medicinal Chemistry (**2010**), 53(5), 2188-2196.
229. BAGNIS, DIEGO; BEVERINA, LUCA; HUANG, HUI; SILVESTRI, FABIO; YAO, YAN; YAN, HENRY; **PAGANI, GIORGIO A.**; MARKS, TOBIN J.; FACCHETTI, ANTONIO.
Marked Alkyl- vs Alkenyl-Substituent Effects on Squaraine Dye Solid-State Structure, Carrier Mobility, and Bulk-Heterojunction Solar Cell Efficiency.
Journal of The American Chemical Society (**2010**), 132(12), 4074-4075.

230. BEVERINA, LUCA; SANGUINETTI, ALESSANDRO; BATTAGLIARIN, GALUCO; RUFFO, RICCARDO; ROBERTO, DOMINIQUE; RIGHETTO, STEFANIA; SOAVE, RAFFAELLA; LO PRESTI, LEONARDO; UGO, RENATO; **PAGANI, GIORGIO A.**
UV absorbing zwitterionic pyridinium-tetrazolate: exceptional transparency/optical nonlinearity trade-off
Chemical Communications (Cambridge, United Kingdom) (2011), 47(1), 292-294.
231. RONCHI, ELISABETTA; RUFFO, RICCARDO; RIZZATO, SILVIA; ALBINATI, ALBERTO; BEVERINA, LUCA; **PAGANI, GIORGIO A.**
Regioselective Synthesis of 1,2- vs 1,3-Squaraines
Organic Letters (2011), 13(12), 3166-3169.
232. COLLINI, E.; CARLOTTO, S.; FERRANTE, C.; BOZIO, R.; POLIMENO, A.; BLOINO, J.; BARONE, V.; RONCHI, E.; BEVERINA, L.; **PAGANI, G.A.**
Multipolar symmetric squaraines with large two-photon absorption cross sections in the NIR region
Physical Chemistry Chemical Physics (2011), 13(25), 12087-12094.
233. BEVERINA, LUCA; DREES, MARTIN; FACCHETTI, ANTONIO; SALAMONE, MATTEO; RUFFO, RICCARDO; **PAGANI, GIORGIO A.**
Bulk Heterojunction Solar Cells - Tuning of the HOMO and LUMO Energy Levels of Pyrrolic Squaraine Dyes
European Journal of Organic Chemistry (2011), 2011(28), 5555-5563.